

AP Statistics
Chapter 9

9.1 Significance Tests: The Basics

DEFINITION: Significance test

DEFINITION: Null hypothesis H_0 , Alternative hypothesis H_a

DEFINITION: One-sided alternative hypothesis and two-sided alternative hypothesis

DEFINITION: *P*-value

How to Make a Conclusion in a Significance Test

DEFINITION: Significance level α

Reject H_0

Fail to reject H_0

DEFINITION: Type I and Type II error

Type I Error Probability

9.2 Tests About a Population Proportion

Conditions for Performing a Significance Test About a Proportion

DEFINITION: Standardized Test Statistic and Formula for Z Test Statistic

Significance Tests: A Four-Step Process

One-Sample z Test for a Proportion

Why Confidence Intervals Give More Information

Two-sided Tests and Confidence Intervals

DEFINITION: Power

Power and Type II Error

How to Increase the Power of a Test

9.3 Tests About a Difference in Proportions

Conditions for Performing a Significance Test about a Difference in Proportions

Two-Sample z Test for the Difference Between Two Proportions

Inference for Experiments